



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,870	03/04/2002	J. Alan Lawson	17308-0019	5875

29052 7590 09/15/2004

SUTHERLAND ASBILL & BRENNAN LLP  
999 PEACHTREE STREET, N.E.  
ATLANTA, GA 30309

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/090,870	LAWSON ET AL	
	Examiner	Art Unit	
	Steve Alvo	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 25-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-23-02</u> . | 6) <input type="checkbox"/> Other: _____  |

The restriction requirement is repeated and made Final. Applicant has not given any reasons as to the additional search required by the non-elected Groups of claims is not an undue burden.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 12-16 and 19-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JAGANNADH, et al (5,238,538).

JAGANNADH, et al teaches applying a direct current electric field (abstract) to a decontamination cell (deinking cell) 1, wherein the pulp slurry (14) is diluted (22) to a consistency of 0.8 to 6.0% (column 7, lines 63-66) to form a slurry of recycled cellulosic wood fibers (fluid) which passes through the deinking chamber and exits out the other side in a continuous manner (column 4, lines 43-45). A portion of the contaminants are separated from the fibers as the slurry flows through the deinking chamber (column 4, lines 22-29). Any difference would have been an obvious modification of JAGANNADH, et al. See column 8, lines 57-59 for recycling newspapers. See Figures 2-7 for different arrangements of anodes and

cathodes with the pulp slurry flowing in between. See Figure 2D for tapered anode and cylindrical housing. If necessary the shape of the container or the relationship between the anode and cathode would have been an obvious design modification. See Figures 6A and 6B for cells having "T" or "L" shapes. See column 4, lines 2—26 for creating gas bubbles which causes flotation of the contaminants and column 4, lines 64-67 for adding air into the slurry.

Claims 9-11 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over JAGANNADH, et al.

JAGANNADH, et al teaches treating the same material (waste paper) in the same manner with (direct current electric field applied between an anode and a cathode ) for the same purpose, (to remove ink and other contaminants from the paper). The amount of voltage required by JAGANNADH, et al would be the same as that claimed as it is being used for the same purpose in the same environment. It would have been obvious to provide the optimum amount of voltage to provide the optimum deinking of the paper. It would have been obvious to optimize the size of the air bubbles introduced at the bottom of storage tank 12 or created in vessel 18. See column 7, lines 46-58 for the velocity of the fluid (waste paper slurry).

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JAGANNADH, et al as applied to claim 1 above, and further in view of LAWSON (5,733,413) or LAWSON et al (6,139,684) or MARKHAM (5,580,446).

LAWSON or LAWSON et al or MARKHAM teach using a light contamination collecting hood in fluid communication with a decontamination chamber which effects light contaminant purging by creating a flow gradient within the chamber between turbulent flow adjacent to the inlet end and laminar flow adjacent to the outlet end. It would have been obvious

Application/Control Number:  
10/090,870  
Art Unit: 1731

Page 4

to further separate the light contaminants of JAGANNADH, et al using the collecting hood and flow of LAWSON or LAWSON et al or MARKHAM.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear if the velocity is of the bubbles or the fluid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa